



**UNIVERSITI PUTRA MALAYSIA**

**IMPACTS OF SOCIAL FORESTRY PROGRAMMES  
ON LOCAL COMMUNITIES AND FOREST CONDITIONS  
IN WEST KALIMANTAN, INDONESIA**

**ANANG SUDARNA**

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**IMPACTS OF SOCIAL FORESTRY PROGRAMMES  
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**By  
ANANG SUDARNA**

**Thesis Submitted in Fulfilment of the Requirement for  
the Degree of Doctor of Philosophy in the Faculty of Forestry  
Universiti Putra Malaysia**

**June 2001**



*In loving memory of  
my respected late father Soeradikrama bin Dipabangsa,  
my respected mother Ny. Sarmah binti Tjakrawidjaja,  
my respected late father and mother in law Soeratman Marso and Ny. Endeh Halinah  
who would have been proud  
my beloved wife Nenny Sumarliany Sudarna  
my beloved son: Muhamad Bayu Mahawelly Sudarna and  
my beloved daughter Safira Qisthina Ayuningtyas Sudarna  
my beloved late son Muhamad Tosan Malayana Sudarna  
to you all I dedicate this work*

Abstract of thesis submitted to the Senate of Universiti Putra Malaysia in fulfilment of the requirement for the degree of Doctor of Philosophy.

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**June 2001**

**Chairman : Associate Professor Dr. Rusli Bin Mohd**

**Faculty : Forestry**

The goal of the study was to evaluate social forestry programmes as an approach towards achieving the goal of sustainable forest management (SFM) by assessing the impacts and outcomes of these programmes on the socio-economic condition of local communities and forest resource conditions. Surveys utilising structured closed-ended questionnaire were carried out on a random sample of 450 participants and 150 non-participants of the programmes of nine selected villages. Informal interview, direct observation, and small group discussion were also conducted to collect the required information.

This research found different impacts at different locations. The programme has caused significant impacts on school going children and training opportunities at one location; on rice production, application of IAT, employment opportunities, training courses, and farmers' skills at another location. However, at both locations the programme failed to improve forest conditions. However, programme implemented at the 3<sup>rd</sup> location has reduced shifting cultivation and

people dependency on forest-based activities, but has increased planting HYV of rubber, employment opportunities, training, farmers' skills, and awareness on the importance of forest sustainability. The programme at this location has also shown promises at increasing forest resource conditions. Above all, the programmes at all locations failed to increase the income of forest-dependent communities. The different findings at different locations were due mainly to different approaches applied in the programme planning and implementation.

The intended objective to get a high people's participation in the programmes has not optimally been realised. The majority of participants participated at medium and low level in decision-making and planning, benefit sharing, and evaluation activities. A higher level of participation was found in the implementation activities. PFM programme was more conducive to encourage people's participation than FVCD programme. Overall, there were only two independent variables; namely extension and empowerment, that had significantly influenced people's participation at all research locations. Unluckily, government services have negatively influenced people's participation.

This study also found that PFM appears to be an appropriate approach toward achieving SFM. In spite this fact, the programme will get a considerable success, if it acknowledges the high potential and strategic position of local communities on forest management appropriately. This necessitates reorientation of forest management policy towards sustaining forest resources through developing human resources. The FVCD programme should be focussed on strengthening local institutions, people empowerment, training courses, and extension services. In this regard, increasing effectiveness of extension services by setting-up network with other government agencies is highly recommended.

The authoritarian and centralise forest development paradigm should radically be reformed to facilitate the implementation of democratic and just forest management policy. The MOF should take steps to accelerate the process in empowering local communities in order for them to contribute in achieving the goal of SFM. Thus, Government Regulations No. 6 of 1998, and MOF's decisions No. 677 of 1995 and No. 523 of 1997, which are not conducive to support this necessity, need to be reviewed. Gaining an appropriate momentum to foster such shift should be persistent efforts of the MOF and fully supported by all stakeholders of forest management who have a moral and responsibility for prospering millions forest-dependent communities and sustaining invaluable Indonesia's forest resources.

Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi syarat untuk mendapatkan ijazah Doktor Falsafah.

**KESAN PROGRAM PERHUTANAN SOSIAL  
KEPADA MASYARAKAT TEMPATAN DAN KONDISI HUTAN  
DI KALIMANTAN BARAT, INDONESIA**

**Oleh**

**ANANG SUDARNA**

**June 2001**

**Pengerusi: Profesor Madya Dr. Rusli Bin Mohd**

**Fakulti : Perhutanan**

Tujuan pengkajian ini adalah untuk menilai program perhutanan sosial sebagai suatu pendekatan untuk mencapai tujuan pengurusan hutan mampan dengan menilai kesan program ke atas keadaan sosial-ekonomi masyarakat tempatan dan kondisi hutannya. Kaedah tinjauan sederhana telah digunakan dalam kajian ini. Proses temubual telah dilakukan keatas 450 peserta dan 150 bukan peserta program di sembilan desa terpilih. Perbincangan dengan sekelompok kecil, temubual tidak formal, dan pemerhatian secara langsung juga dilaksanakan untuk mengumpulkan semua maklumat yang diperlukan.

Kajian ini mendapati kesan yang berbeda pada tiap tempat. Program pada tempat pertama menghasilkan kesan positif pada pendidikan kanak-kanak dan peluang latihan. Pada lokasi kedua program menghasilkan kesan yang nyata dalam meningkatkan hasil keluaran padi, penerapan teknologi, peluang kerja dan latihan, dan keterampilan petani. Tetapi, di kedua-dua tempat program tidak menghasilkan apa-apa kesan dalam memperbaiki kualiti hutan. Program yang

dilaksanakan di tempat ketiga menghasilkan kesan positif dalam mengurangkan kegiatan pertanian pindah dan kebergantungan masyarakat pada kegiatan-kegiatan berlandaskan hutan, tetapi program di tempat ini menghasilkan kesan dalam peningkatan penanaman pokok getah unggul, peluang pekerjaan dan latihan, keterampilan petani, dan kesedaran masyarakat tentang pentingnya pelestarian hutan. Program di lokasi ini juga berkesan dalam pemulihan kondisi hutan. Namun demikian, kesemua program yang dikaji gagal meningkatkan pendapatan masyarakat yang penghidupannya bergantung pada hutan.

Keinginan untuk meningkatkan penyertaan masyarakat dalam pelaksanaan program dan pelestarian sumber hutan tidak mencapai hasil yang memuaskan. Penyertaan dari sebahagian terbesar masyarakat tempatan dalam perancangan dan pengambilan keputusan, perkongsian hasil, dan evaluasi, didapati pada tahap sederhana atau rendah. Tahap penyertaan yang lebih tinggi berlaku pada pelaksanaan kegiatan. Program di tempat ketiga didapati lebih berguna untuk meningkatkan penyertaan masyarakat daripada program di kedua tempat lainnya. Keseluruhannya, hanya ada dua aktiviti, iaitu penyuluhan dan penguatkuasaan masyarakat, yang mempengaruhi secara langsung penyertaan masyarakat. Malangnya, pentadbiran pemerintah berkesan negatif terhadap penyertaan masyarakat tempatan.

Kajian ini mendapati bahawa PFM adalah pendekatan yang paling sesuai dalam pengurusan hutan untuk mencapai kelestariannya. Disamping fakta itu, PFM akan lebih berjaya, jika semua potensi strategik masyarakat tempatan dapat digunakan secara optimal dalam pengurusan hutan. Hal ini mengharuskan adanya perubahan pandangan ke arah pengurusan sumber hutan melalui pembinaan sumber manusia. Program FVCD harus dipusatkan pada pengukuhan



lembaga-lembaga tempatan, penguatkuasaan masyarakat, latihan, dan penyuluhan. Dalam kaitan ini, peningkatan dayaguna penyuluhan melalui kerjasama dengan agensi pemerintah lainnya sangatlah disarankan.

Konsep pengurusan hutan yang menumpu harus diubah untuk menyokong pelaksanaan kebijaksanaan pengurusan hutan yang adil dan demokratik. Kementerian Perhutanan haruslah mengambil langkah-langkah dalam mempercepat penguatkuasaan masyarakat tempatan agar mereka dapat berperan dalam pengurusan hutan mampan. Oleh itu, Peraturan Pemerintah No. 6/1999, dan Keputusan Menteri Kehutanan No. 677/1995 dan No. 523/1997, yang kurang menyokong perubahan ini harus dikaji semula. Kekuatan untuk mendorong perubahan harus dilaksanakan secara berterusan oleh Kementerian Perhutanan dan disokong oleh mana-mana pihak yang mempunyai keinginan dan tanggung jawab dalam mensejahterakan jutaan masyarakat yang penghidupannya bergantung kepada hutan dan pelestarian sumber hutannya.

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Serdang, June 2001

Anang Sudarna



I certify that an Examination Committee met on 7<sup>th</sup> June 2001 to conduct the final examination of Anang Sudama on his Doctor of Philosophy thesis entitled "Impacts of Social Forestry Programmes on Local Communities and Forest Conditions in West Kalimantan, Indonesia" in accordance with Universiti Pertanian Malaysia (Higher Degree) Act 1980 and Universiti Pertanian Malaysia (Higher Degree) Regulation 1981. The Committee recommends that the candidate be awarded the relevant degree. Members of the Examination Committee are as follows:

Zahid Emby, Ph.D.  
Faculty of Human Ecology  
Universiti Putra Malaysia  
(Chairman)

Rusli Mohd, Ph.D.  
Associate Professor,  
Faculty of Forestry  
Universiti Putra Malaysia  
(Member)

Dudung Darusman, Ph.D.  
Professor,  
Faculty of Forestry  
Institut Pertanian Bogor, Indonesia  
(Member)

Lim Hin Fui, Ph.D.  
Techno Economy Division  
Forest Research Institute Malaysia  
(Member)

Khamurudin Bin Mohd Noor, Ph.D.  
Faculty of Forestry  
Universiti Putra Malaysia  
(Member)

Fredrick W. Cubbage, Ph.D.  
Professor,  
Collage of Forest Resources  
North Carolina State University, USA  
(Independent Examiner)

  
\_\_\_\_\_  
MOHD. GHAZALI MOHAYIDIN, Ph.D.  
Professor/Deputy Dean of Graduate School,  
Universiti Putra Malaysia

Date: 19 JUN 2001

This thesis submitted to the Senate of Universiti Putra Malaysia has been accepted as fulfilment of the requirement for the degree of Doctor of Philosophy.



---

AINI IDERIS, Ph.D.  
Professor,  
Dean of Graduate School  
Universiti Putra Malaysia

Date: \_\_\_\_\_

I hereby declare that the thesis is based on my original work except for quotation and citations, which have been duly acknowledged. I also declare that it has not been previously or concurrently submitted for any other degree at UPM or other institutions.



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ANANG SUDARNA

Date: 18<sup>th</sup> June 2001

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## LIST OF ABBREVIATION AND GLOSSARY

### A. Abbreviation

AMDAL	Analisis Mengenai Dampak Lingkungan ( <i>Environmental Impact Assessment</i> )
BANGDES	Pengembangan Desa ( <i>Village Development</i> )
BAPPEDA	Badan Perencanaan Pembangunan Daerah ( <i>Regional Development Planning Board</i> )
BIPHUT	Balai Inventarisasi dan Perpetaan Hutan ( <i>Centre for Forest Inventory and Mapping</i> )
BLIHK	Balai Latihan dan Informasi Hutan Kemasyarakatan ( <i>Centre for Training and Information of Social Forestry</i> )
HHBK-NTFPs	Hasil Hutan Bukan Kayu ( <i>Non Timber Forest Products</i> )
HL	Hutan Lindung ( <i>Protection Forest</i> )
HP	Hutan Produksi ( <i>Production Forest</i> )
HPT	Hutan Produksi Terbatas ( <i>Limited Production Forest</i> )
HPH	Hak Pengusahaan Hutan ( <i>Forest Concession</i> )
HTI	Hutan Tanaman Industri ( <i>Industrial Timber Estate</i> )
IDT	Inpres Desa Tertinggal ( <i>Poverty Alleviation Program</i> )
ITTO	Organisasi Internasional Kayu Tropika ( <i>International Tropical Timber Organisation</i> )
KPLH	Koordinator Pembina Lahan Hutan ( <i>Co-ordinator of Village Forest Rangers</i> )
KWTH	Koordinator Wanita Tani Hutan ( <i>Co-ordinator of Woman Forest Farmer</i> )
LSM-NGO	Lembaga Swadaya Masyarakat ( <i>Non Government Organisation</i> )
MOF	Departemen Kehutanan ( <i>Ministry of Forestry</i> )
MUSBANGDES	Musyawarah Pembangunan Desa ( <i>Village Development Meeting</i> )
PKHP-PFMA	Pengelolaan Kawasan Hutan Partisipatif ( <i>Participatory Forest Management Area</i> )
PLH	Pembina Lahan Hutan ( <i>Village Forest Ranger</i> )
PLHK	Penyuluh Lapangan Hutan Kemasyarakatan ( <i>Social Forestry Extension Workers</i> )
PLP	Penyuluh Lapangan Penghijauan ( <i>Regreening Field Extension Worker</i> )
PLPMDH	Penyuluh Lapangan Pembinaan Masyarakat Desa Hutan ( <i>Forest Village Community Development Extension Worker</i> )
PMDH – FVCD	Pembinaan Masyarakat Desa Hutan ( <i>Forest Village Community Development</i> )
PPHK – SFDP	Proyek Pengembangan Hutan Kemasyarakatan ( <i>Social Forest Development Project</i> )
PPL	Penyuluh Pertanian Lapangan ( <i>Agricultural Field Extension Worker</i> )

PPS	Penyuluh Pertanian Spesialis ( <i>Subject Matter Specialist in Extension</i> )
PUSKESMAS	Pusat Kesehatan Masyarakat ( <i>Community Health Centre</i> )
POSYANDU	Pos Pelayanan Terpadu ( <i>Integrated Services Post</i> )
PUSTU	Pukesmas Pembantu ( <i>Subordinate Community Health Centre</i> )
RAKORBANG	Rapat Kornasi Pembangunan ( <i>Development Co-ordination Meeting</i> )
RKL	Rencana Karya Lima Tahun ( <i>Five Years Working Plan</i> )
RTL	Rencana Karya Tahunan ( <i>Annual Working Plan</i> )
RRL	Reboisasi dan Rehabilitasi Lahan ( <i>Reforestation and Land Rehabilitation</i> )
SD	Sekolah Dasar ( <i>Elementary School</i> )
SKB	Surat Keputusan Bersama ( <i>Letter of Joint Decision</i> )
SMP	Sekolah Menengah Pertama ( <i>Junior High School</i> )
SMU	Sekolah Menengah Umum ( <i>Senior High School</i> )
TGHK	Tata Guna Hutan Kesepakatan ( <i>Forest Land-Use Plan by Consensus</i> )
TGLDK	Tata Guna Lahan Desa Kesepakatan ( <i>Participatory Village Land-Use Plan</i> )
TPTI	Tebang Pilih Tanam Indonesia ( <i>Indonesian Selective Cutting and Planting System</i> )
UBSPP	Usaha Bersama Simpan Pinjam Pedesaan ( <i>Village Savings and Credit Association</i> )
KUB	Kelompok Usaha Bersama ( <i>Self-help Group</i> )
UDKP	Usulan Desa Koordinasi Pembangunan ( <i>Village Development Co-ordination Proposal</i> )
UTHM	Usaha Tani Hutan Menetap ( <i>Permanent Agroforestry Area</i> )

## B. Glossary

<i>Hukum Adat</i>	Customary Law
<i>Bupati</i>	Head of Kabupaten (District)
<i>Camat</i>	Head of Kecamatan (Sub District)
<i>Damar</i>	Resin from Dipterocarpaceae tree species
<i>Desa</i>	Administrative Village
<i>Dinas</i>	Government Services
<i>Dusun/Kampung</i>	Hamlet, Settlement
<i>Kabupaten</i>	Administrative District
<i>Kantor Wilayah</i>	Regional Offices of a Ministry at provincial level
<i>Kecamatan</i>	Administrative Sub District
<i>Kehutanan</i>	Forestry
<i>Lembaga</i>	Organisation, in PFMA context: village forest user association
<i>Penyuluhan</i>	Extension
<i>Perikanan</i>	Fisheries
<i>Perkebunan</i>	Estate Crops
<i>Peternakan</i>	Animal Husbandry
<i>Swadaya</i>	Self help, Voluntary
<i>Tanaman Pangan</i>	Food crop Agriculture

# **CHAPTER 1**

## **INTRODUCTION**

### **1.1 Background**

During the New Order Government era, from 1968 to 1998, the national development of Indonesia has been devoted to establishing the economy in which the contribution of forest resources and forest-based industries has been important. The need for capital, foreign exchange, and employment creation in the beginning process of economic development forced the Government of Indonesia (GOI) to extensively utilise the Indonesia's rich natural forest resources in the Outer Islands through granting forest concession system to the private sectors, both domestic and foreign companies. This policy was taken after the GOI enacted Statute No. 1 of 1967 concerning Foreign Capital Investment, Statute No. 5 of 1967 concerning Forestry Principles, and Statute No. 7 of 1968 concerning Domestic Capital Investment, and subsequent operational regulations, viz. Government Regulation, Presidential Decrees, Presidential Instructions, and Ministerial Decisions.

The impacts of the forest policy were manifested in the immense exploitation of forest resources. In macro economic level, some indicators showed these impacts. The log production increased from 1.4 million m<sup>3</sup> in 1960 to 28.26 million m<sup>3</sup> in 1993/1994 (the highest annual log production during the first long-term development: 1969-1994), more than 20 fold increase in 32 years. Moreover, forest-based industries, mostly sawmills and plywood mills, were numerous built across the country. As results, the production of plywood



increased from 0.4 million m<sup>3</sup> in 1968 to 10.27 million m<sup>3</sup> in 1997, and sawn timber production also increased from 0.17 million m<sup>3</sup> in 1968 to 10.24 million m<sup>3</sup> in 1989. It is noteworthy that sawn timber production tended to decrease in the last decade, i.e. to only 2.61 million m<sup>3</sup> in 1997/1998 (MOF, 1996; 1999).

Therefore, forestry and the forest-based industries have grown from a situation of almost negligible contribution to the economy of the country, to one of the pillars of economic development of the country during the first long-term development (MOF, 1999). The significance achievement was shown in the export performance of forest products, in which the benefits of forest resource utilisation have been mostly realised. Revenues from exports of forest products have increased from US\$ 750 million in 1972 to about US\$ 6.15 billion in 1993/1994 (the highest export revenues), and in 1995 the revenue was US\$ 5.16 billion (MOF, 1996). In addition, the forestry sector has also contributed in creating jobs opportunities. In 1995, for example, 4.5 million Indonesians were employed in the forest management and other forestry-related activities.

From the local people and resources sustainability standpoint, however, the success story mentioned above is debatable, because there is a clear indication that changes in socio-economic conditions of the local people has not directly followed the significant contribution of the sector to the macro economic development of the country. The data of 1995, for instance, showed that 34 % out of 27.2 million of poor people in Indonesia live in the villages within and surrounding forest resources areas (MOF, 1996).

During the recent economic crisis (1997-1999), the condition was predicted getting worse indicated by increasing forest encroachment, illegal